

DAY 1 ACTIVITY

Interface & Navigation Tutorial



— About the QGIS Interface


1. Keyboard & mouse are the primary methods of interfacing with QGIS.
2. **Both keyboard & mouse input are contextual.** This means...
 - a. Your mouse performs different functions depending on which tool is active
 - b. You can tell what tool you are using based on your cursor
 - c. Some keyboard inputs do different thing depending on the active frame
 - d. Some tools require a feature selection
3. QGIS interface is built around **menus**, **toolbars** and **panels**.
 - a. Menus are found across the top of the screen. Here, you can access all of QGIS' functionalities. However, most functions can also be accessed more easily and directly through a toolbar or panel.
 - b. Toolbars exist around the edge of the QGIS map view. They are bars which hold a number of tool icons. These provide quick access to common tools.
 - c. Panels could be thought of as a mini-window that offers streamlined access to certain information. The best example of this is the layers panel, which functions somewhat like a table-of-contents, showing the layers in your project & how they are ordered.
 - d. Customize which panels & toolbars are shown by accessing the *View* menu at the top of the screen (*View > Panels* and *View > Toolbars*).

— Download & Open GIS Data Packet

4. Download the GIS Packet from our website (look under “Resources”):
legiongis.com/pages/introduction-to-gis.html
5. Unzip **GIS_Packet.zip** by right-clicking on it (it should be in your downloads folder) & selecting “Extract All...” In the pop-up dialogue, accept the default options & click “Extract Here”. A new folder named **GIS_Packet** will appear.
6. Open the **GIS_Packet** folder & look inside to find a file named **GIS_Intro_Project.qgs**
7. Double-click on the **.qgs** file to open it. Quantum GIS should launch automatically.

— Navigating the Map View


8. Navigate through the map view using the **Pan** tool.
 - a. Can be accessed through the toolbar 
 - b. Click & drag to move the map view
 - c. Tap arrow keys to nudge the map view (canvas must be active frame)
9. Adjust the zoom level (map scale) using the **Zoom** tool.
 - a. Can be accessed through the toolbar button 
 - b. Can also be accessed with the default hotkey **ctrl + '+'**
 - c. Click to zoom
 - d. Drag an extent to fit that extent within the map view


- e. Scroll to zoom in or out (mouse scroll wheel, trackpad scroll function)
 - If your trackpad does not have a scroll function, it is probably worth your while to find a mouse to use.
- f. If the zoom is 'too fast' or 'too slow', go to *Preferences > Map Tools > Panning and Zooming* to set the zoom factor. The zoom factor must be 1.1 or greater.
- g. If you get 'lost', try the **Zoom to Layer** tool in the navigation toolbar 

There are other zoom tools which are quite useful:



Zoom Full (fit all visible layers within the map view) 

Zoom to Selection (fit all selected features on the active layer in view) 


Pan Map to Selection (center view on selection w/o changing scale) 

Zoom Last (return map view to most recent scale/extent) 

10. Layers & Groups

- a. Layers are listed in the layers panel in the order they are drawn.
- b. The bottom layer is drawn first, with other layers stacked sequentially on top.
- c. Click & drag on layers in the layers panel to reorder them.
- d. Toggle layer visibility by clicking on the checkbox to the left of each layer.
 - When the box is checked, the layer is visible.
 - Clicking on the checkbox for a group sets the visibility for all layers in that group.
 - Groups show a check when **all** layers are visible; show a dash when **only some** layers are visible.
- e. Groups are identified by a special icon: 
- f. Expand and collapse groups using the chevron (▸) next to the group name.
- g. Expand & collapse all items/groups using the buttons in the mini-toolbar at the top of the layers panel 

11. Select & Identify Features

- a. Toggle visibility for Historic Schools layer (click the checkbox)
- b. Make layer active (click on it in the layers panel)
- c. Activate the Identify Features tool by clicking on it in the toolbar 
- d. Click on a point feature to identify it. A new panel will open which contains attribute information for that feature.
- e. Identified features will be highlighted in red.
- f. Activate Municipal Bounds layer & see name & GNIS ID
- g. Activate DEM layer & identify point to get elevation
- h. Different layers contain different types of information